

## **REMARKS**

### **1. Introduction**

In the final Office Action mailed August 10, 2005, the Examiner rejected all pending claims under 35 U.S.C. § 103(a) as being unpatentable over various combinations of references. The Examiner rejected claims 2, 4, 6, 7, 10, and 11 over U.S. Patent No. 6,434,381 (Moore) in view of U.S. Patent No. 6,434,381 (Papadimitriou). The Examiner rejected claim 3 over Moore in view of Papadimitriou, and further in view of U.S. Pub. No. 2002/0107029 (Caughran). The Examiner rejected claim 5 over Moore in view of Papadimitriou, and further in view of U.S. Patent No. 6,233,448 (Aplerovich). The Examiner rejected claims 8 and 15 over Moore in view of Papadimitriou, and further in view of U.S. Pub. No. 2003/0060211 (Chern). The Examiner rejected claim 9 over Moore in view of Papadimitriou, and further in view of Chern and U.S. Patent No. 6,650,902 (Richton). The Examiner rejected claims 12 over Richton in view of Papadimitriou. The Examiner rejected claims 13 and 14 over Richton in view of Papadimitriou, and further in view of Caughran and Chern.

Claims 2-15 are currently pending.

For the reasons set forth below, Applicants request reconsideration and allowance of the claims.

### **2. Response to the Claim Rejections**

#### **a. Claims 2-8, 10, 11, and 15**

Of these claims, claim 4 is independent and the other claims are dependent therefrom. The Examiner has rejected claim 4 under § 103 as being unpatentable over Moore in view of Papadimitriou. In response, Applicants submit that this rejection is improper and should be

withdrawn because the Examiner has not shown that the Moore/Papadimitriou combination teaches each and every element of claim 4.

Claim 4 recites (i) “associating a level of granularity with the service identifier” and (ii) “based on the service identifier, instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity.” The Examiner has acknowledged that Moore does not teach these elements and has instead relied on Papadimitriou. However, the Examiner’s arguments with respect to elements (i) and (ii) are inconsistent.

For element (i), the Examiner has identified the “location request” in Papadimitriou as the “service identifier” recited in claim 4. This “location request” is received from the mobile device user in location request step 215 (col. 5, lines 56-58; Figure 2).

For element (ii), however, the Examiner has cited to “Col. 6, lines 41-18” of Papadimitriou (the “18” appears to be a typographical error that should instead be “48”). This section makes clear that the precision of the location estimate is **not** based on the “location request” that the Examiner has characterized as a “service identifier.” Instead, this section discloses that the precision of the location is based on **priority information** obtained **after** the user’s “location request” is received in location request step 215:

[T]he LMUs servicing the terminal device use the priority information generated in the GMLC location estimate request step 235 to estimate the location of the terminal device to a predetermined precision in a location estimate step 245.

(col. 6, lines 41-45).

Figure 2 illustrates the sequence of steps in Papadimitriou. As shown in Figure 2, the user requests the location of the mobile device in location request step 215, the user is requested to enter a desired priority level in prompt for priority step 220, and the desired priority level is checked against the subscribed priority level in step 225 (col. 5, line 56 – col. 6, line 8). If the

desired priority level is lower than or equal to the subscribed priority level, then the algorithm proceeds to GMLC location estimate request 235, in which the GMLC sends a request for a location estimate to the LMUs (col. 6, lines 8-29). Thus, assuming *arguendo* that the Examiner’s identification of the “location request” as the “service identifier” in element (i) is valid, it does not work for element (ii) because Papadimitriou discloses that the precision of the location estimate is based on “priority information” that the user provides separately from the “location request.” Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness under § 103.

In addition, claim 4 recites “receiving a request for location based information regarding a service, the request *including* a service identifier.” As noted above, Papadimitriou discloses using “priority information” that is obtained *after* the user’s location request to determine the precision of the location estimate. Thus, if Moore were to be combined with Papadimitriou, the result would not be the method of claim 4. At best, the result would be a method in which the user makes a request for location based information regarding a service and is subsequently prompted to enter additional information on which the level of granularity for the position determination is based.

Accordingly, Applicants submit that claim 4 is allowable over Moore and Papadimitriou for at least the foregoing reasons. Applicants further submit that claims 2, 3, 5-8, 10, 11, and 15 are allowable for at least the reason that that the claims are dependent on an allowable claim.

**b. Claim 9**

The Examiner has rejected claim 9 under § 103 as being unpatentable over Moore in view of Papadimitriou and in further view of Chern and Richton. In response, Applicants submit

that this rejection is improper and should be withdrawn because the Examiner has not shown that this combination teaches each and every element of claim 9.

Claim 9 recites “associating a level of granularity with the service identifier” and “based on the service identifier, instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity.” The Examiner’s rationale for rejecting claim 9 relies on the disclosure of Papadimitriou for these two elements. However, as set forth above for claim 4, the Examiner’s argument for why Papadimitriou discloses these two elements is internally inconsistent.

Accordingly, Applicants submit that claim 9 is allowable over Moore, Papadimitriou, Chern, and Richton for at least the foregoing reasons.

**c.      Claim 12**

The Examiner has rejected claim 12 under § 103 as being unpatentable over Richton in view of Papadimitriou. In response, Applicants submit that this rejection is improper and should be withdrawn because the Examiner has not shown that the Richton/Papadimitriou combination teaches each and every element of claim 12.

Claim 12 recites “receiving from the switch a request for location based information regarding a service, wherein the request includes a service identifier, and wherein the service identifier is associated with the service.” The Examiner has alleged that this element is disclosed in Richton at col. 3, lines 9-28. However, this section of Richton simply describes the components of location-based server 221. The section does not refer to receiving any request at all, much less a request from a switch as recited in claim 12. For this reason alone, the Examiner’s rejection of claim 12 is deficient and should be withdrawn.

In addition, the Examiner has acknowledged that Richton does not disclose the elements of “associating a level of granularity with the service identifier” and “based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity” recited in claim 12. Instead, the Examiner has relied on Papadimitriou for these elements. However, as set forth above for claim 4, the Examiner’s argument for why Papadimitriou discloses these two elements is internally inconsistent.

Accordingly, Applicants submit that claim 12 is allowable over Richton and Papadimitriou for at least the foregoing reasons.

**d. Claims 13 and 14**

Of these claims, claim 13 is independent. The Examiner has rejected claim 13 under § 103 as being unpatentable over Richton in view of Papadimitriou in view of Caughran and in view of Chern. In response, Applicants submit that this rejection is improper and should be withdrawn because the Examiner has not shown that this combination teaches each and every element of claim 13.

Claim 13 recites “receiving a request for location based information regarding a service, the request including a service identifier, wherein the service identifier is associated with the service.” The Examiner is alleged that this step is disclosed in Richton at col. 3, lines 9-28 and at col. 6, lines 31-34 and 46-52. However, these sections of Richton do not disclose any such request. As noted above for claim 12, col. 3, line 9-28 refers to the components of a location-based server and does not refer to any request at all. The sentence at col. 6, lines 31-34 suggests that location-based controller 301 can make a request to determine the location of a wireless mobile unit, rather than a request for location based information regarding a service that also includes a service identifier, as in claim 13. The sentence at col. 6, lines 46-52 states that

location-based preferences server 305 works in conjunction with location-based controller 301 but does not refer to any request as recited in claim 13. Thus, the Examiner has failed to show that this element is actually disclosed in Richton.

In addition, the Examiner has acknowledged that Richton does not disclose the elements of “associating a level of granularity with the service identifier” and “instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity” recited in claim 13. Instead, the Examiner has relied on Papadimitriou for these elements. In making this rejection, the Examiner correctly noted that in Papadimitriou the accuracy of the mobile phone’s location is based on a “priority level.” However, claim 13 specifies that the level of granularity is associated with a service identifier that is ***included*** in the request for location based information. In contrast, the “priority level” in Papadimitriou is not included in the user’s request that is received in location request step 215. Instead, Papadimitriou teaches that the user selects a subscribed priority level in an earlier step (priority level assignment step 205) and selects a desired priority level in a later step (prompt for priority step 220). *See* col. 5, lines 47-54; col. 5, line 66 – col. 6, line 2; Figure 2. Thus, the Examiner’s reliance on Papadimitriou is improper.

Accordingly, Applicants submit that claim 13 is allowable over Richton, Papadimitriou, Caughran, and Chern for at least the foregoing reasons. Applicants further submit that claim 14 is allowable for at least the reason that that the claim is dependent on an allowable claim.

**3. Conclusion**

Applicants submit that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at any time at (312) 913-0001.

Respectfully submitted,  
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